



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,131	12/13/2001	Roger A. Bullivant	11198/05201	2805

26116 7590 08/17/2004

SIDLEY AUSTIN BROWN & WOOD LLP  
717 NORTH HARWOOD  
SUITE 3400  
DALLAS, TX 75201

EXAMINER

COTTINGHAM, JOHN R

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/022,131

Applicant(s)

BULLIVANT, ROGER A.

Examiner

John R. Cottingham

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-15 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-25 is/are rejected.
- 7) ☒ Claim(s) 30-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3679

## DETAILED ACTION

### *Specification*

1. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3679

3. Claims 1-2 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts U.S. Patent 4,813,717. Watts shows all of the claimed subject matter of a connector in Figures 1-4.

Regarding claim 1, a connector comprising: a housing 8 having a first interior surface defining a first passage that extends in an axial direction between a first aperture and an intermediate portion of the housing 8 (intermediate portion is the transition between the threads and the smooth part), and a second interior surface defining a second passage (threaded portion) that extends in the axial direction between a second aperture (second end, both ends of 8 are open to allow fluid flow) and the intermediate portion of the housing; a joining member 2 for joining the housing 8 to a second housing 9, the joining member has an exterior surface, where the first interior surface includes a first mating surface, and the exterior surface includes a second mating surface, wherein the first and second mating surfaces are configured such that the joining member can be pushed into (with enough force, and force is used to push the threads together to push them together, and a pushing force is used in the rotation) and thereby locked into, the first axially extending passage.

Regarding claim 2, the second interior surface includes a threaded portion

3.

Regarding claim 5, the first mating surface 3 of the housing 8 includes a plurality of protruding portions (threads), each protruding portion extends in a direction perpendicular to the axial direction, each protruding portion has a saw-tooth cross section that is sloped towards the first aperture (front side of each

Art Unit: 3679

thread) of the housing 8 and flat towards the intermediate portion (backside of thread) of the housing.

Regarding claim 6, the joining member 2 has a first end and a second end thereof and extends in a longitudinal direction between the first and second ends thereof, and wherein the second mating surface includes a plurality of protruding portions (threads), each protruding portion extends in a direction perpendicular to the longitudinal direction, and each protruding portion has a saw-tooth cross section (as seen in Fig. 2) that is sloped towards the first end of the joining member and is flat towards the second end of the joining member 2.

Regarding claim 7, the exterior surface of the joining member 2 extends between the first end of the joining member and the second end of the joining member 2 and includes an intermediate portion thereof, wherein the second mating surface extends between the first end of the joining member and the intermediate portion 21 of the joining member, wherein the exterior surface of the joining member includes a third mating surface that extends between the second end of the joining member and the intermediate portion of the joining member 2, and wherein the third mating surface (opposite end) includes a plurality of protrusions, each protruding portion extends in a direction perpendicular to the longitudinal direction, and each protruding portion has a saw-tooth cross section that is sloped towards the second end of the joining member and is flat towards the first end of the joining member.

Art Unit: 3679

4. Claims 1, 3-4, 27-29, rejected under 35 U.S.C. 102(e) as being anticipated by McCallion U.S. Patent 6,265,065. McCallion shows all of the claimed subject matter of a connector in Figures 1-8.

Regarding claim 1, a connector comprising: a housing 20 having a first interior surface defining a first passage that extends in an axial direction between a first aperture and an intermediate portion 16 of the housing, and a second interior surface defining a second passage (other side of 16) that extends in the axial direction between a second aperture and the intermediate portion of the housing; a joining member 12' for joining the housing 20 to a second housing (not shown, but is capable of connecting to another housing 20), the joining member 12' has an exterior surface, where the first interior surface includes a first mating surface, and the exterior surface includes a second mating surface, wherein the first and second mating surfaces are configured such that the joining member can be pushed into (with enough force, and force is used to push the two parts together before they are heat shrunk on) and thereby locked into the first axially extending passage.

Regarding claim 3, the housing has an extending portion (bumps on the outside surface) which extends radially from an external side of the housing.

Regarding claim 4, the housing has a plurality of extending portions extending radially therefrom (bumps on the outer surface), each extending portion also extends in the axial direction between the second aperture of the housing and the intermediate portion of the housing, wherein the extending portion is one of the plurality of extending portions.

Art Unit: 3679

Regarding claim 27, a reinforced concrete sectional pile comprising: a reinforcing bar 12 molded into a concrete pile section (see abstract), the reinforcing bar extends in a longitudinal direction; a housing 20 provided on an end of the reinforcing bar, the housing having a first interior surface defining a first passage that extends in the longitudinal direction between a first aperture and an intermediate portion of the housing, and a second interior surface defining a second passage that extends in the longitudinal direction between a second aperture and the intermediate aperture portion of the housing, wherein the end of the reinforcing bar is disposed within the second passage of the housing; and a joining member 12' for joining the housing to a second housing, the joining member has an exterior surface, wherein the first interior surface includes a first mating surface, and the exterior surface includes a second mating surface, wherein the first and second mating surfaces are configured such that the second member can be inserted and thereby locked into the first passage.

Regarding claim 28, the housing 20 has an extending portion which extends radially from an external side of the housing.

Regarding claim 29, the external side of the housing has a plurality of extending portions extending radially therefrom (the bumps on the outer surface of 20), each extending portion also extends in the longitudinal direction between the second aperture of the housing and the intermediate portion of the housing, wherein the extend portion is one of the a plurality of extending portions.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts U.S. Patent 4,813,717 in view of Chambers U.S. Patent 5,406,983. Watts claims all of the structural limitations of the connector, as described above, but does not show the connector made of polyphthalamide. However, Chambers teaches the use of polyphthalamide (col. 4, lines 61-69) with 40% -60% by weight of glass fibers (col. 4, lines 10-16) to protect against corrosion. It would have been within the level of one of ordinary skill in the art at the time the invention was made to make the housing and joining member of Watts out of polyphthalamide, as taught by Chambers et al., to prevent corrosion.

7.

***Allowable Subject Matter***

8. Claims 8-15, 26 allowed.

9. Claims 30-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



***Response to Arguments***

10. Applicant's arguments filed 3/24/04 have been fully considered but they are not persuasive. The applicant argues that Watts does not show mating surfaces being pushed together, and locked. The Examiner disagrees, the parts are pushed together in a diagonal direction through the twisting of the threads, but a pushing force is applied and meets the limitation.

11. The Applicant also argues that McCallion does not show the mating surfaces being pushed into the joining member, the Examiner disagrees with this view. The two bars in McCallion have to be pushed into the joining member and are locked by friction in the joining member.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

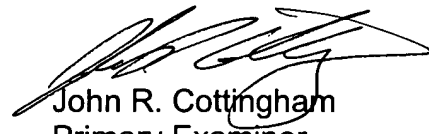
Art Unit: 3679

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703) 306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John R. Cottingham  
Primary Examiner  
Art Unit 3679

jrc